

The Altermatt lab at the Institute of Evolutionary Biology and Environmental Studies (IEE) of University of Zurich and the Department of Aquatic Ecology of Eawag, Switzerland, has a vacancy for:

Two PhD Studentships in Ecology

Project title: Bridging biodiversity and ecosystem functioning in dendritic networks: a meta-ecosystem perspective

Understanding the causes and consequences of biodiversity is among the most challenging goals in ecology. Recent results indicate a generally positive effect of diversity on ecosystem processes. Up to now, almost all work on biodiversity-ecosystem functioning has been conducted in a non-spatial, one-patch perspective. Natural ecosystems, however, are spatially explicit, and there is substantial flow of material and organisms among patches and ecosystems. This project aims at applying the concept of meta-ecosystems to empirical data in spatially explicit dendritic networks.

In a project including two complementing PhD theses and a Postdoc fellow, we will use a laboratory protist microcosm system to experimentally test interacting effects of habitat network structure and ecosystem functioning (PhD Project 1). We will extend these findings to mesocosm experiments and large-scale field studies with amphipods to study ecosystem functioning in Swiss river networks (PhD Project 2). Finally, we will synthesize the findings. In the whole project, diversity and ecosystem functioning will be studied in spatially explicit dendritic networks in a highly consistent framework. Ultimately, we want to get a comprehensive understanding of biodiversity and ecosystem functioning in riverine systems.

Competitive applicants will have previous experience in ecology, biodiversity and spatial dynamics and be interested in participating in this extensive new research project. They will be highly motivated, enthusiastic and independent persons with a passion for science. Candidates should have a good conceptual understanding of ecological theory, excellent experimental skills and/or a background in quantitative modeling. Excellent communication and writing skills in English, good work ethics, and creative thinking are desired. A Masters level degree (or equivalent) in Ecology or related subject is necessary for admission. The working language in the Altermatt lab is English.

The Altermatt lab has a shared base at University of Zurich and at Eawag. It offers a stimulating and international research environment, excellent research facilities and a lively and social working place. Zurich hosts many other research groups in ecology and biodiversity research, and is among the world's leading cities in terms of science, culture and quality of life. The positions will be for a period of three years, and could start in August 2014 or thereafter. The PhD students will be enrolled at University of Zurich and be part of the PhD Program in Ecology.

The project is financed by the Swiss National Science Foundation (SNSF Research Professorship to Florian Altermatt from August 2014 onwards).

For further information, consult

<http://homepages.eawag.ch/~altermfl/Home.html>

<http://www.ieu.uzh.ch/index.html>

www.eawag.ch

or directly contact Dr. Florian Altermatt: Tel: [+41 58 765 55 92](tel:+41587655592), E-mail: florian.altermatt@eawag.ch

Applications must be submitted by 10th May 2014 and should include a motivation letter with a description of pertinent experience, a complete CV (incl. publication list), the names (with e-mail addresses) of three academic references, and copies of certificates of academic qualifications. The application should be submitted as one single pdf-file.

We look forward to receiving your application through the online application form at:

<http://internet1.refline.ch/673277/0267/++publications++/1/index.html>

Any other way of applying will not be considered.